

CLAIMS

1. An interface for use with a portable rechargeable device comprising:  
a first contact interface system for receiving a male connector comprising an housing with a front surface, wherein the front surface includes an aperture leading to a well within the housing, and wherein a first positive contact is disposed within the well and a first negative contact is disposed within the well; and  
a second contact interface system comprising conductive contacts disposed on the front surface outside the aperture, wherein the conductive contacts comprise a second positive contact and a second negative contact.
2. The interface of claim 1, wherein the portable rechargeable device is a wireless headset.
3. The interface of claim 1, wherein both the first contact interface system and the second contact interface system utilize the aperture in the front surface to mate with corresponding contacts on a charger.
4. The interface of claim 1, wherein the second contact interface utilizes the aperture to receive a member from a charger to align and detent the conductive contacts on the portable device with corresponding contacts on the charger.
5. The interface of claim 4, wherein the aperture includes a semi-spherical surface that the member from the charger mates with to align and detent the conductive contacts on the portable device with corresponding contacts on the charger.
6. The interface of claim 1, wherein the first positive contact comprises a spring coil contact flexible during coupling and the first negative contact comprises a pin structure that inserts into the male connector.
7. The interface of claim 6, wherein the pin structure is disposed in the center of the well within the housing.

8. The interface of claim 1, wherein the positive terminal and the negative terminal are electrically coupled to the terminals of a rechargeable battery at the headset and transfer charging power to the battery, allowing either the first charging interface system or the second charging interface system to be used independently from the other to transfer charging current.
9. The interface of claim 1, wherein the aperture is substantially circular.
10. The interface of claim 1, further comprising a mounting means for mounting the contact device on the headset
11. The interface of claim 1, wherein the first positive contact and second positive contact are a single piece construction, and wherein the first negative contact and second negative contact are a single piece construction.
12. A charging interface system between a charging base and a wireless headset comprising:  
a wireless headset charging interface disposed at a headset comprising:
  - a first headset contact interface system for receiving a male connector comprising an housing with a front surface, wherein the front surface includes an aperture leading to a well within the housing, and wherein a first positive contact is disposed within the well and a first negative contact is disposed within the well; and
  - a second headset contact interface system comprising conductive contacts disposed on the front surface outside the aperture, wherein the conductive contacts comprise a second positive contact and a second negative contact; and  
a charging base interface disposed at a charging base comprising:
  - a hollow inner cylindrical core with a longitudinal axis;
  - an actuator disposed within the hollow inner cylindrical core capable of movement within the cylindrical core along the axis; and

a spring contact with a conductive contact disposed in part within the hollow inner cylindrical core and coupled to the actuator, wherein the spring contact is capable of compression and decompression along the longitudinal axis based on movement of the actuator, and wherein the actuator extends into the aperture when the charging base interface is coupled to the wireless headset charging interface.

13. The charging interface system of claim 12, wherein the aperture includes a semi-spherical recessed surface and the actuator includes a semi-spherical end such that the actuator inserts into the semi-spherical recessed surface.

14. A charging interface for use with a headset comprising:  
a housing with a front surface, wherein the front surface includes an aperture leading to a well within the housing; and

conductive contacts disposed on the front surface outside the aperture, wherein the conductive contacts comprise a positive contact and a negative contact, and wherein the aperture receives a charger member to align and detent the conductive contacts with corresponding contacts on the charger.

15. The charging interface of claim 14, wherein the aperture includes a semi-spherical surface that the charger member mates with to align and detent the conductive contacts with corresponding contacts on the charger.
16. The charging interface of claim 14, wherein the aperture is substantially circular.
17. The charging interface of claim 14, further comprising a mounting means for mounting the charging interface on the headset.